West Virginia Wildlife Habitat Evaluation Technique

Appendix 1

Home Range – Home ranges (how far an animal will travel and how often) are influenced by the quality and distribution of various habitat elements. Each individual animal has a home range. All the requirements for its livelihood must be found within this range. Food plants, water and prey must be within physical reach. Various types of cover must be present and in sufficient quantity, quality and arrangement to be usable as needed.

Vegetative Habitat Elements – Within the home range of each animal, some factor limits the population growth. Remove that condition and the population will grow until another factor establishes the limit. These condition limits can be grouped into two categories: (1) Conditions which are inherited and (2) those which are environmental. Most inherited traits are difficult to influence such as mobility (i.e. the ability of a certain species to fly as opposed to walking). However, we may be able to influence some of the environmental conditions that impose limiting factors for population growth. Specifically, those vegetative elements which impose limits on cover, reproduction and food supply. These vegetative elements are commonly defined as grain and seed crops, grasses and legumes, wild herbaceous upland plants, deciduous trees and shrubs, coniferous trees and shrubs and wetland plants.

Grain and Seed Crops – These crops include, but are not limited to, seed-producing annuals such as corn, rye, wheat, barley, oats, millet, buckwheat, sunflower and other plants commonly grown commercially for grain or seed. Waste grain from these crops is essential to many species of wildlife for a fall and/or winter food supply. This element can be best provided by managing crop residues with wildlife needs in mind. Crop residue management and stubble mulching are conservation practices used on cropland which will help provide this element. In addition, special handling of these crops to provide more seed (such as leaving the outside 2-4 rows of grain unharvested in a field) may be needed to meet a particular situation. Also, special plantings of grain and seed crops can be, and are made to attract a particular wildlife species to specific locations at specific times for specific purposes.

Domestic Grasses and Legumes – Making up this group are domestic grasses and legumes that are established by planting which will furnish wildlife cover and/or food. Among these plants are bluegrass, orchard grass, timothy, clover, alfalfa, crownvetch and flatpea. Hayland, pastureland, seeded woods roads, log landings, field borders, grasses waterways, orchards, and roadsides established and maintained with wildlife considerations will provide this habitat element. In addition, native warm season grasses are included in this element. Warm season grasses provide additional nesting and brood habitat, and in some instances supplemental food sources. If managed properly, these grasses may provide an additional source of cover in winter months for a variety of wildlife.

Deciduous Trees and Shrubs – This element includes non-coniferous trees, shrubs, and woody vines that produce nuts or other fruits, buds, catkins, twigs or foliage that wildlife eat. They are normally found in large woodland areas, riparian zones, etc. They generally establish naturally, but may be planted. Among the native kinds are oaks, cherries, birches, maples, poplars, beech, apple, hawthorn, dogwoods, sumacs, hazlenut, blueberry, alder, viburnums, grape, blackberry, and raspberry. Diverse age and composition are usually desirable to provide good wildlife habitat. Also in this group are several varieties of introduced fruiting and ornamental shrubs that are raised commercially for planting. Crabapple, high bush cranberry, and silky cornel dogwood are some of the shrubs that generally are available and have wildlife food and cover values.

Coniferous Trees and Shrubs – This element consists of cone-bearing evergreen trees and shrubs that are used by wildlife primarily as cover, though they provide browse and seed. Among them are spruces, white pine, red pine, virginia pine, eastern hemlock, balsam fir, red cedar and yew. Generally, the plants are established naturally, but they may also be planted, if the site does not have a native seed source. Few species of wildlife benefit from even-age stands of conifers.

Uneven age and mixed species provide the best habitat element conditions. Young coniferous trees provide valuable wildlife cover and browse. However, as trees become large and naturally prune and thin themselves, the value drastically decreases.

Wild Herbaceous Upland Plants (Non-Wetland Plants) – In this group are native or introduced perennial grasses and weeds that generally are established naturally. Some examples are, goldenrod, wild carrot, joe-pye weed, ironweed, plantain, nightshade, ragweed, and dandelion. These are found throughout abandoned fields, burned areas, utility lines, fence lines and odd areas, and are often mixed with deciduous shrub growth. Wild herbaceous upland plants are established mainly through mowing, soil disturbances, controlled burning, and grazing control. Very few are planted.

Wetland Plants – Making up this group are wild herbaceous and woody plants that grow on moist to wet sites, exclusive of submerged or floating aquatics. They produce food and cover for upland wildlife although they are wetland species. For example, pheasants use cattail and rushes for winter cover, while deer feed on sedges in early spring. Desirable wetland plants include smartweeds, cattails, burreeds, barnyard grass, rushes and sedges. The establishment and growth of most wetland plants are controlled by water depth and fluctuation. Seed or plant sources can be introduced to speed this growth process and to introduce more desirable species. Water, however, is usually the limiting factor controlling the species and composition of wetland plants.

Normal Agronomic Practices – This term applies to science based treatments used on a regular basis to manage agricultural land and alleviate a resource problem for a specified purpose. Specifically, common practices may include, but are not limited to: regular application of lime and fertilizer, grazing height management, mowing, tilling, disking or plowing, harvesting of crops, haying and any similar practice used in the regular management of this type of land.

Approved Prescribed Burning Plan – A prescribed burn is primarily utilized to manage warm season grasses and wild herbaceous plants. This is an excellent way to remove thatch, create soil disturbance and reduce competition. However, in order to execute a prescribed burn, an employee of the NRCS must be trained, certified and approved to write prescribed burning plans. In addition, the WV Division of Natural Resources and WV Division of Forestry personnel must provide assistance and approval for any burns performed. All applicable permits for such activities must also be obtained prior to burning. Contact the state staff biologist for current USDA policy concerning prescribed burns.

Proper Pasture Management – This term applies to areas utilized for pasture that are actively applying a livestock grazing plan to manage forage height, forage quality, nutrient utilization, and soil condition through a variety of conservation practices.